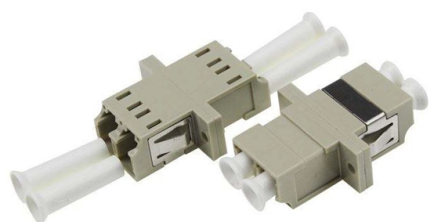


Complete List of Multimode Fiber Optic Models



AI Overview

Multimode fiber is classified into five main categories—OM1, OM2, OM3, OM4, and OM5—each with distinct core sizes, bandwidths, and distance capabilities for short-range network applications. Overview of Multimode Fiber Multimode fiber (MMF) has a larger core diameter, typically 50 μm or 62.5 μm , allowing multiple light modes to propagate simultaneously. This makes it ideal for short-distance communication, such as within buildings, campuses, or data centers. MMF uses lower-cost light sources like LEDs or VCSELs and operates mainly at 850 nm and 1300 nm wavelengths. It is generally used for distances up to 550 meters, depending on the fiber type and data rate, whereas single-mode fiber is used for longer distances due to its smaller core and lower attenuation.

Multimode Fiber Categories

Fiber Type	Core Size	Jacket Color	Bandwidth / Modal Bandwidth	Max Distance (10G Ethernet)	Typical Applications	Light Source
OM1	62.5 μm	Orange	200 MHz·km at 850 nm	33 m	Legacy 100 Mb/s networks, older buildings	LED
OM2	50 μm	Orange	500 MHz·km at 850 nm	82 m	1G Ethernet, limited 10G	LED
OM3	50 μm	Aqua	2000 MHz·km at 850 nm	300 m	10G Ethernet, 40G/100G short links	VCSEL (laser-optimized)
OM4	50 μm	Aqua	4700 MHz·km at 850 nm	550 m	10G/25G/40G/100G Ethernet, data centers	VCSEL (enhanced laser-optimized)
OM5	50 μm	Lime Green	4700 MHz·km at 850 nm, supports SWDM	550 m	High-speed, wideband applications, future-proofing	VCSEL, SWDM (shortwave wavelength division multiplexing)

Key Points OM1 and OM2 are older standards, primarily used in legacy networks and are LED-optimized, making them less suitable for modern high-speed applications. OM3 and OM4 are laser-optimized multimode fibers (LOMMF), designed for VCSEL-based transceivers, supporting higher data rates and longer distances, making them the mainstream choice for modern data centers. OM5 exte...

Article Content

Multimode Fiber OM1 vs OM2 vs OM3 vs OM4 vs OM5

Identified by ISO 11801 standard, multimode fiber optic cables can be classified into OM1 fiber, OM2 fiber, OM3 fiber, OM4 fiber and newly released OM5 fiber. The next part will compare

The FOA Reference For Fiber Optics

Fiber Optic Tool Kits The fiber optic installer needs a complete set of fiber optic tools and test equipment, plus supplies used in pulling cables, splicing and terminating

Fiber Optics and Types

Fiber optic cables are used for long-distance and high-performance data networking. They are capable of transmitting data over longer distances and

Definition, Types and Applications of Optical Fiber

We are aware that optical fiber has completely revolutionised the communications industry. A core, cladding, and coating make up an optical fiber

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Multimode Optical Fiber Selection & Specification

Tables 3 and 4 list prevailing implementations of Ethernet and Fibre Channel, respectively, with their corresponding wavelength of operation and distance capabilities for CCS fiber types.

Fiber Optic Cable Types * | Single Mode | Multimode

Latest Fiber Optic Cable Technologies Network Cabling is an important part of computer networking. In this lesson, we will focus on one of the important

OM1 vs OM2 vs OM3 vs OM4 vs OM5 Multimode Fiber

Compare OM1, OM2, OM3, OM4, and OM5 multimode fiber specs, distances, bandwidth, and applications. Essential guide for data center fiber

Fiber Optic Cable Types | Omnitron Systems Guide

Conclusion Understanding fiber optic cable types, fiber core sizes, and proper installation methods is essential for building high-speed, reliable fiber networks.

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Fiber Optic Cable Components & Materials: Complete

Explore the 5 key fiber optic cable components and materials used in modern networks. Learn how glass, coatings, and strength members affect

Fiber Optic Cable Types: A Complete Guide

Here's everything you need to know about the various fiber optic cable types, what makes them so useful, and what type of fiber optic cables you want

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Fiber Connector Types: A Complete Guide (2024)

What is a Fiber Connector? The fiber connector is called a fiber optic or optical fiber connector. It is a precise coupling device that joins fiber optic

Fiber Optic Connector Types: A Beginners Guide

The fiber connector types, sometimes referred to as terminations, link fiber optic cables together through terminals, switches, adapters, and patch

Cisco 40GBASE QSFP Modules Data Sheet

Cisco QSFP-40G-CSR-S (S-Class) The QSFP-40G-CSR-S is a pluggable optical transceiver with a duplex LC connector interface used for connectivity using MultiMode Fiber (MMF).

Multimode Fiber: OM1 to OM5 – MapYourTech

This comprehensive guide explores the five primary categories of multimode fiber—designated as OM1, OM2, OM3, OM4, and OM5—each

The Ultimate Guide to SFP Modules (2026): Types,

Confused by SFP vs SFP+? Read the definitive 2026 guide on SFP modules. We explain Single Mode vs Multimode, DDM diagnostics, and how to choose the

Classification of Optical Fiber (The Complete Guide

Now optical fiber communication has become the mainstream method of communication transmission. The market is full of all kinds of optical fiber

Fiber Optic Cable Types: Single-Mode, Multimode, and

Discover fiber optic cable types, including single-mode (OS1, OS2) and multimode (OM1, OM2, OM3, OM4, OM5), indoor/outdoor variants, and how

Fiber Optic Cable Types: A Complete Guide

The plethora of fiber optic cable types can seem overwhelming, but choosing the right cable for the job is important. Read on to learn what fiber optic

109 Fiber Optic Cable Manufacturers in 2026

This section provides an overview for fiber optic cables as well as their applications and principles. Also, please take a look at the list of 109 fiber optic cable manufacturers and their company rankings.

The Fiber-optic Modeling and Design Software RP Fiber

The software RP Fiber Power of RP Photonics can be used for analyzing and optimizing a wide range of passive and active fiber-optic devices.

Fiber Optic Connectors: Detailed Guide to Types and Uses

Fiber optic connectors might be small, but they play a big role in ensuring fast and reliable data transfers. They link fiber optic cables, allowing data to move quickly

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A Guide to Multimode Fiber Types (OM1-OM5) -

OM1-OM5 multimode fiber standards, detailing their core sizes, jacket colors, transmission capabilities and more.

Fiber Optic Cable Types Explained

Our comprehensive guide to types of fiber optic cables. Learn all about the differences between single mode and multimode cables, as well as the various

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